From: James Marca
To: Microsoft ATR
Date: 1/23/02 5:26pm
Subject: Microsoft Settlement

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My name is James Marca. I am a graduate student in Civil Engineering at UC Irvine. I object on many points to the propose Microsoft Settlement, and as a citizen of the State of California, I am quite happy that my State Attorney General is one of those pushing for a stronger settlement.

In short, I believe the federal government caved. I believe that the Republican party has been swayed by the money, as well as its traditional sweet spot for big business. Unfortunately, the Enron debacle demonstrates vividly that the free market and self-regulation is not good enough at stemming the worst excesses of corporate greed.

Allow me to digress slightly.

Microsoft is an aggressive, smart company, who are quite capable of crushing competition in all forms. When Netscape came out with their Navigator browser and the WWW was essentially brand new, I was working in Boston at a consulting firm. When we finally got Internet access at our desks, it was a revelation. My friend and I had a long running email exchange about what this new medium meant. I remembered Marshall McLuhan's book, The Medium is the Massage, which I had read as an undergraduate when I was working on my senior (engineering!) thesis. For several months I read that random pages from that book, and thought about how McLuhan was really describing the Internet, not electricity and television. I proposed to my friend (a programmer in Palo Alto) that we should leverage hypertext to create a browsing platform, not just for display, as Netscape was doing, but for running programs like spreadsheets and word processors. My friend wrote back saying forget it, Netscape was already pushing that front, and they had a huge head start.

At the time, I was sick and tired of Windows applications crashing. The thought of an alternative operating system was really appealing to me, as my company had just converted to MS Office, disallowing the use of Lotus and WordPerfect in the name of corporate standardization. Right before I went back to graduate school, I was working on a document with our publication department in which many spreadsheet figures were embedded in an MS Word document. That sucker crashed if you made two changes. So to proof-read the document, edit the WYSIWYG elements, and so on, we had to open it up, make one change, save, close, reopen, change, save, close, and so on. When I got back to grad school, I found LaTeX, then later Linux, and I no longer use Microsoft products. (YAY!)

I told you that story so I could tell you this one.

I am not a lawyer, and I cannot decipher many of the details of the

proposed settlement. Therefore, I have read through many of the comments that are available on the Internet. One of the best is by Robert Cringely, available at:

http://www.pbs.org/cringely/pulpit/pulpit20011206.html

If I may, I'd like to quote from that document, starting with the seventh paragraph:

\begin{quote}

Here is what I mean. The remedies in the Proposed Final Judgment specifically protect companies in commerce -- organizations in business for profit. On the surface, that makes sense because Microsoft was found guilty of monopolistic activities against "competing" commercial software vendors like Netscape, and other commercial vendors -- computer vendors like Compaq, for example. The Department of Justice is used to working in this kind of economic world, and has done a fair job of crafting a remedy that will rein in Microsoft without causing undue harm to the rest of the commercial portion of the industry. But Microsoft's greatest single threat on the operating system front comes from Linux -- a non-commercial product -- and it faces a growing threat on the applications front from Open Source and freeware applications.

The biggest competitor to Microsoft Internet Information Server is Apache, which comes from the Apache Foundation, a not-for-profit. Apache practically rules the Net, along with Sendmail, and Perl, both of which also come from non-profits. Yet not-for-profit organizations have no rights at all under the proposed settlement. It is as though they don't even exist.

\end{quote}

I would add that the biggest competitor to Microsoft Word, in the academic market, is LaTeX and TeX, a public domain text layout system. Again, free software.

\begin{quote}

Section III(J)(2) contains some very strong language against not-for-profits. Specifically, the language says that it need not describe nor license API, Documentation, or Communications Protocols affecting authentication and authorization to companies that don't meet Microsoft's criteria as a business: "...(c) meets reasonable, objective standards established by Microsoft for certifying the authenticity and viability of its business, ..."

So much for Samba and other Open Source projects that use Microsoft

calls. The settlement gives Microsoft the right to effectively kill these products.

Section III(D) takes this disturbing trend even further. It deals with disclosure of information regarding the APIs for incorporating non-Microsoft "middleware." In this section, Microsoft discloses to Independent Software Vendors (ISVs), Independent Hardware Vendors (IHVs), Internet Access Providers (IAPs), Internet Content Providers (ICPs), and Original Equipment Manufacturers (OEMs) the information needed to inter-operate with Windows at this level. Yet, when we look in the footnotes at the legal definitions for these outfits, we find the definitions specify commercial concerns only.

But wait, there's more! Under this deal, the government is shut out, too. NASA, the national laboratories, the military, the National Institute of Standards and Technology -- even the Department of Justice itself -- have no rights. It is a good thing Afghanistan is such a low-tech adversary and that B-52s don't run Windows.

I know, I know. The government buys commercial software and uses contractors who make profits. Open Source software is sold for profit by outfits like Red Hat. It is easy to argue that I am being a bit shrill here. But I know the way Microsoft thinks. They probably saw this one coming months ago and have been falling all over themselves hoping to get it through. If this language gets through, MICROSOFT WILL FIND A WAY TO TAKE ADVANTAGE OF IT.

\end{quote}

My fear is that one day I will buy a computer whose motherboard BIOS requires me to run Microsoft's latest subscription-based operating system, which will in turn only allow me to run Microsoft's subscription-based office suite, and Microsoft's subscription-based compiler will be the only one that can take advantage of Microsoft's proprietary windows API. Paranoid, perhaps. But this laptop that I am typing on came with Windows ME. Only Windows ME. I loaded up Slackware Linux 8.0 immediately, and had no problems, and yet Sony was unable to sell me this laptop without Windows ME, due to licensing restrictions from Microsoft. The only laptops I could find with Linux on them were very expensive models from IBM---out of my budget. So I was \*forced\* to pay Microsoft for a copy of windows that I \*do not\* use. I had no recourse, other than not buying the laptop.

Back to applications and APIs.

There is no way to take a LaTeX document and save it as a Word document, since there is no public documentation of the Word file format, and reverse engineering that format might be illegal

illegal (if I understand the restrictions of the DMCA properly). So if I want to work with co-workers on a document, I am forced to save as RTF, or rich text format. Luckily the good folks at AbiWord and OpenOffice have developed utilities to read Word documents and convert them into editable text. But there is no reverse, save as Word option.

There is nothing in this settlement that will make my situation easier, and plenty that will make it worse. At home I am going to set up a Samba file server and printer gateway, so that my wife and I can both use the new printer without switching cables and so on. Samba has been in danger from Microsoft for some time. About a year ago, Microsoft engaged in some textbook embrace-and-extend (the same way they snatched html from Netscape) with the Kerberos authentication system, thus forcing the Samba guys to play catch-up with Windows 2000. I can't find details on that situation, but I did find this older Samba document, from the Samba.org website:

\begin{quote}

## The Future

Windows 2000 looms on the horizon like a lazy animal peeking its head over the edge of its burrow while trying to decide whether or not to come out. No one is exactly sure about the kind of animal it will be when it does appear, but folks are fairly certain that it will have teeth.

Because of their dominance on the desktop, Microsoft gets to decide how CIFS will grow. Windows 2000, like previous major operating system releases, will give us a whole new critter to study. Based on the beta copies and the things that Microsoft has said, here are some things to watch for:

CIFS Without NetBIOS. Microsoft will attempt to decouple CIFS and NetBIOS. NetBIOS won't go away, mind you, but it won't be required for CIFS networking either. Instead, the SMB protocol will be carried natively over TCP/IP. Name lookups will occur via the DNS. Dynamic DNS

Microsoft will implement Dynamic DNS, a still-evolving system designed by the IETF (Internet Engineering Task Force). Dynamic DNS allows names to be added to a DNS server on-the-fly. Kerberos V

Microsoft has plans to use Kerberos V. The Microsoft K5 tickets are supposed to contain a Privilege Attribute Certificate (PAC), which will include user and group ID information from the Active Directory. Servers will be looking for this PAC when they grant access to the services that they provide. Thus, Kerberos may be used for both authentication and authorization. Active Directory

The Active Directory appears to be at the heart of Windows 2000 networking. It is likely that legacy NetBIOS services will register their names in the Active Directory. Hierarchical NT Domains

Instead of isolated Domain Controllers, the NT Domain system will become hierarchical. The naming system will change to one that is remarkably similar to that of the DNS.

...

Whatever the next Windows animal looks like, it will be Samba's job to help it get along with its peers in the diverse world of the Internet.

\end{quote}

And of course, Microsoft's job is to try to kill the Samba effort, so that they can sell more licenses to software.

I fail to see how the proposed settlement addresses Microsoft extending its monopoly to the Internet, which is dominated by free software at the moment, nor how it addresses the attempts by Microsoft to preserve its dominance of the desktop market, where the only credible alternative is Linux and programs written for Linux. In fact, the settlement appears to allow Microsoft at best to ignore and at worst actively litigate against (for reverse engineering, etc) its largest potential competitor---free software.

You have not required MS to open up their APIs to all comers, only to commercial entities. Open source projects, on the other hand, open their source to all comers, Microsft included. So Microsoft (or any commercial company) can look at the Apache code, the Samba code, and so on, and take the best features that they see.

You may think this is silly, that commercial companies have better code than free software advocates, and so on. But consider this interview with Donald Knuth, inventor and programmer of TeX, from http://www.advogato.org/article/28.html

\begin{quote}

Q: I noticed, for example, that in the proprietary software market for publishing, that systems are only today acquiring features that have existed in TeX for a long time, for example whole-paragraph optimization. There's a big to-do about Adobe InDesign, which finally...

A: They finally implemented the TeX algorithm.

Q: Did they implement the TeX algorithm?

A: Yeah, that's what they said.

Q: Did you talk to the people?

A: I met three of four of them at the ATYPI meeting in Boston in October, but that was after I had heard about it, that some friends had found this in the documentation.

\end{quote}

The fertile development environment envisioned by free software pioneers such as Richard Stallman and Eric Raymond is happening in the open source world. I have often opened up perl and C++ source code to learn about better ways to do things in my own code, and when I take snippets I credit the source, and make sure that my own code is at least as open (GPL2 or Artistic licenses being my personal favorites). But the transfer of ideas and techniques appears to be a one-way street from the free software world to the proprietary software world. Companies like Microsoft take. And then in the settlement they don't even have to open up their APIs to free software programmers! APIs are NOT code. They are just hooks into compiled code. So I can't see the crappy or excellent source code with an API, I just get to see the advertised \*capabilities\* of compiled code. And yet Microsoft does not have to share this with me, because I am not a viable commercial entity.

Why does this matter? Because I am the future of this country, as is my office mate, my advisor, undergraduates I work with, and as is my 18 month old daughter. I share my knowledge with these people, and I encourage them to learn and share back.

I am developing a peer-to-peer traffic information and control system which I hope will be open to all. I call it the Autonet. I pride myself on the idea that it may become ubiquitous, and so I wrote the term and the ideas in my notebook last year. But otherwise I have made no effort to hide my ideas, because I feel what I am doing will be best served if everybody has a hand in it---many hands make light work, but also many eyes can watch big brother. But my system has to run on Linux. I dare not base any of my code on Microsoft tools and APIs, because they can pull the rug out from under me at any time. I am not a commercial entity, but I am an academic, and a programmer of modest expertise. I can develop useful tools and products, and I will do so for Linux. However, who will use my code if MS kills Linux, if it becomes illegal to reverse engineer APIs, if Lindows is crushed and prevented from marketing a Linux within Windows setup (or whatever it is they've got going over there). And when computers are plonked in cars (they are beginning to pop up now), you can bet that MS will try to get all of them to run Windows. If my ideas are the best thing

going, they will steal my ideas and release a featureful extension of my APIs, and they can legally withhold their extensions to my API from me! Of course, that is a far off and improbable future, but you proposed settlement is weighing heavily in my mind. Why should I bother with this innovation, if it will get extended and stolen by Microsoft? Why should anyone try to break the rules, if the legal rules are written and enforced to the advantage of the entrenched monopolies?

I do hope you back out of this embarrassing sell-out of a settlement. Failing that, I hope that my attorney general is able to get a much stronger settlement in effect for California residents.

Thank you for your time on this rambling letter.

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ps, as I am about to mail this off, I did one more search on Google for the Samba stuff I remember. Here is one link of many that turned up in my search (type Kerberos Samba embrace extend)

http://techupdate.zdnet.com/techupdate/stories/main/0,14179,2582875,00.html

The article points out that Microsoft did nothing legally wrong, since they exploited a hole in the BSD-style license. But there is the smoking gun of trying to kill Samba by taking and not giving back.

james